Honeywell



AEROSPACE

The TALIN™ Series provides continuous, self-contained, accurate location and pointing information for improved situational awareness.

Tactical Advanced Land Inertial Navigator (TALIN) System

Small, flexible, lightweight, and reliable — The continued evolution of the proven, best-value navigation system for the digital battlefield.

Continuous position, pointing, and targeting solutions



- Flexible tactical configuration for combat vehicles, target acquisition, main battle tanks, infantry fighting vehicles, mortar systems, and artillery systems
- State-of-the-art plug "N" play sensors facilitate technology upgrades and platform missionizations
- Instant on! On-the-move alignment
- Multiple accuracy configurations to meet different application requirements
- Selected for use on more than 30 platforms like Bradley FIST, Striker, Bradley A3, Mortar Fire Control System, NLOS, IBCT FIST, IBCT Mortar, USMC CLAWS, Towed Artillery Digitization, Swiss FO, and others.

Tactical Advanced Land Inertial Navigator

TALIN[™] Series

Flexible, reliable, best-value Inertial Navigation System.

System Characteristics¹

Parameter	TALIN 500	TALIN 1000	TALIN 2000	TALIN 3000	TALIN 4000	TALIN 5000
Horiz. Pos INU only INU/VMS INU/VMS/GPS PPS INU/VMS/GPS SPS	1% of DT CEP < 10 m CEP < 60 m CEP	< 120m CEP 0.8% of DT CEP < 10m CEP < 60m CEP	< 35m CEP 0.5% of DT CEP < 10m CEP < 60m CEP	< 25m CEP 0.35% of DT CEP < 10m CEP <60m CEP	< 18m CEP 0.25% of DT CEP < 10m CEP < 60m CEP	< 12m CEP 0.20% of DT CEP < 10m CEP < 60m CEP
Vertical Pos INU only INU/VMS INU/VMS/GPS PPS INU/VMS/GPS SPS Heading/Pointing Accuracy (RMS)	0.6% of DT PE < 10 m PE < 75m PE < 7 mils RMS	1.0% of DT PE 0.5% of DT PE < 10m PE < 75m PE < 7.0 mils or < 6.0 mils*	< 30m PE 0.25% of DT PE < 10m PE < 75m PE < 4.0 mils or < 2.0 mils*	< 16 m PE 0.20% of DT PE < 10m PE < 75m PE < 2.0 mils or < 1.0 mils*	< 10 m PE 0.15% of DT PE < 10m PE < 75m PE < 1.0 mils or < 0.5 mils*	< 7m PE 0.10% of DT PE < 10m PE < 75m PE < 0.7 mils or < 0.35 mils*
*Sec (Lat) Heading Stability (RMS)	N/A	< 0.5 deg/hr	< 0.4 mils/hr	< 0.3 mils/hr	< 0.2 mils/hr	< 0.15 mils/hr
Pitch & Roll Accuracy (RMS)	< 3 mils RMS w/ GPS	< 2.0 mils	< 1.0 mils	< 1.0 mils	< 0.5 mils	< 0.35 mils
Max Alignment Time Static or Gyro Compass Dynamic or "On the Move"	< 10.0 minutes	< 10.0 minutes < 12.0 minutes	< 5.0 minutes < 12.0 minutes	< 5.0 minutes < 12.0 minutes	< 10.0 minutes < 16.0 minutes	< 15.0 minutes < 16.0 minutes

Operating	Ranges

Attitude Alignment and orientation in any

direction

• Angular Rate +200 deg/sec

• MTBF² >10,000-13,000 hours

Power Requirements

• 18-32 Vdc² < 30 watts

Thermal Operating Range

• No cooling required -46°C to $+71^{\circ}\text{C}$ (-51°F to $+160^{\circ}\text{F}$)

Navigation Sensors

• Standard 3-axis inerital sensors (internal),

VMS, PLGR

• Optional² GPS with NMEA I/F (external or

embedded), magnetic compass

Software Modular — partitioned for cost-

effective system missionization

Interfaces

Standard
 1553A & B/RS-422/RS-232 serial host

interface, PLGR, VMS

Optional Additional RS-422/RS-232 data

interface, CAN-Bus, GPS antenna,

Ethernet

Form Factor Approx. 6.8 x 5.0 x 8.6 inches

(excluding flanges & connectors)

(219 x 175 x 127 mm)

Weight <15 pounds (<7kg)

Installation Can be hard mounted in any

orientation

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¹ Per definitions in TALIN system specifications

Application and configuration dependent